



**Connecticut
Light & Power**

The Northeast Utilities System



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**TESTIMONY OF RICHARD A. SODERMAN
THE CONNECTICUT LIGHT AND POWER COMPANY
and YANKEE GAS SERVICES COMPANY**

**Energy and Technology Committee
February 10, 2011**

P.S.B. No. 255 - AN ACT CONCERNING SOLAR RENEWABLE ENERGY CERTIFICATES

Good afternoon. My name is Richard Soderman, and I am Director of Legislative Policy and Strategy for Northeast Utilities Service Company, appearing on behalf of the Connecticut Light and Power Company and Yankee Gas Services Company.

I would like to start with some good news. CL&P's residential electric rates went down by about 7.8% as of January 1, 2011, providing relief to our customers, and especially those with limited incomes. Second, our current residential rates are more than 13% less than what they were in January 2009. Third, based on our expectations on costs in the future, we anticipate further reductions in our rates in 2012, in all, totaling about 15% from their peak. Thus, electric bills have become less of a burden on all customers, including those on limited incomes. I implore the legislature to avoid taking actions that, in effect, spend those savings through new programs or diversions, and instead let those reductions flow on to residential and business consumers.

Turning to S.B. 255, this bill proposes somewhat vaguely to amend existing statutes to create a solar renewable energy credit. As drafted, the bill is not clear as to the intent or purpose of such credits. We note that solar is already considered a Class 1 renewable, and that technology has received significant subsidies of the almost \$200 million of funds collected in the renewables charge over the last decade. We remain concerned that Connecticut energy policy continues to be a series of one-off policy commitments without an overall assessment of where that is taking Connecticut consumers.



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In last year's session, there was great debate about solar photovoltaic investment, with the supportive argument that in-state solar investment will create new jobs. Unfortunately, if large commitments to solar are made, it will raise rates for other businesses, thereby reducing existing employment. Unlike our energy efficiency programs, which are labor intensive and locally staffed, solar investment would have a much lower job creation potential. While some jobs would be created, they would primarily be in the installation portion of the total project, which represents only about 12 percent of total cost. The larger portion of value, the solar panels, represent about ½ of the total cost. Those panels are manufactured generally overseas.

Our neighbor state, Massachusetts, embarked on a "local" renewables approach, and recent events indicate that it has been a costly strategy that has not produced the jobs it anticipated. For example, Massachusetts attempted to encourage local manufacturing of solar panels, and in 2008 provided \$58 million in development funds to support that business. Unfortunately, in January 2011, that company indicated that it would be closing its Massachusetts solar facility, and placing its 800 workers in jeopardy. Instead, its panels will be manufactured elsewhere (some in China). Massachusetts also supported expensive offshore wind, and it has encouraged its utilities to purchase that power at prices that are about double today's energy costs. Other Massachusetts utilities are entering contracts for land-based wind from the north at prices that are less than ½ of the offshore wind project.

Principal Costs Drivers	% of Total	\$/watt	Anticipated Variability / Potential
IPV Modules	52%	3.50	Fabrication; innovation; channels
DC-AC Conversion Equipment	5%	0.35	Inverter technology is maturing
Other Balance of Plant Materials	12%	0.82	Equip is agnostic to solar
Site Preparation & Design	10%	0.68	Site driven; small/disparate players
Installation	12%	0.82	Site driven; small/disparate players
Support Costs	9%	0.64	Many small items; improves w/ scale
Total	100%	6.80	

Costs of Renewable Technology

This chart illustrates the raw costs of various renewable technologies. Some are close to the cost of traditional electricity. Others cost many times as much. Even with various existing subsidies, many of these technologies remain costly. Unfortunately, studies indicate that

Technology	Estimated Levelized Costs	Cents/kwh
Landfill Gas	5.6	Today's power supply costs are in the range of 8 cents/kWh. Thus, implementing several of these technologies would raise rates substantially.
Biomass	11.0	
Hydro	11.0	
Wind	11.2	
Fuel Cells	17.4	
Offshore Wind	19.9	
Solar PV	52.0	



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Connecticut does not have significant opportunities for the most economical technologies.

The point of this discussion is to emphasize that a responsible renewable policy needs to balance several factors, including jobs, economic activity and impacts on consumers. We find it confusing that, to date, Connecticut has focused on the more expensive means of clean energy. At the same time, the debate continues regarding CT's high energy costs, and the state has cut its most cost effective clean energy resource, energy efficiency.

While there is not specific language in the existing bill to determine the impacts on customers, including state and municipal governments, we offer to work with you and the Office of Fiscal Analysis to determine any such impacts as you further develop potential language for this proposal.

Thank you for the opportunity to comment on this proposed legislation.